20501D.ES2260DT

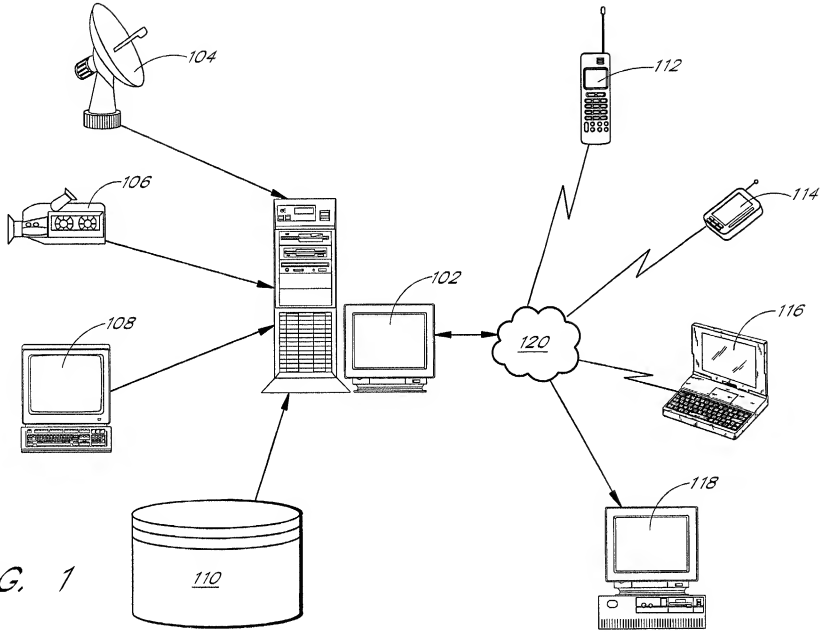


FIG. 1

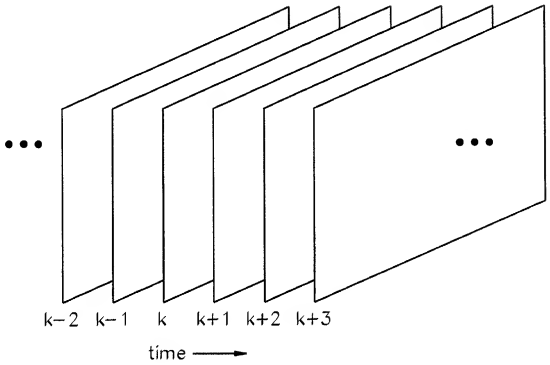


FIG. 2

20050052600A1

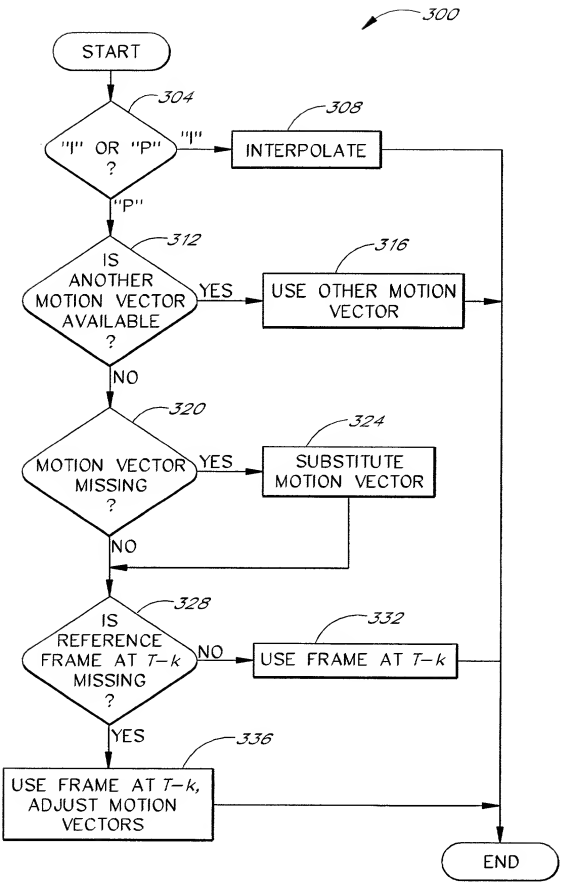


FIG. 3

20050035260A1

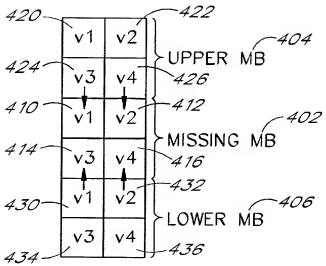


FIG. 4

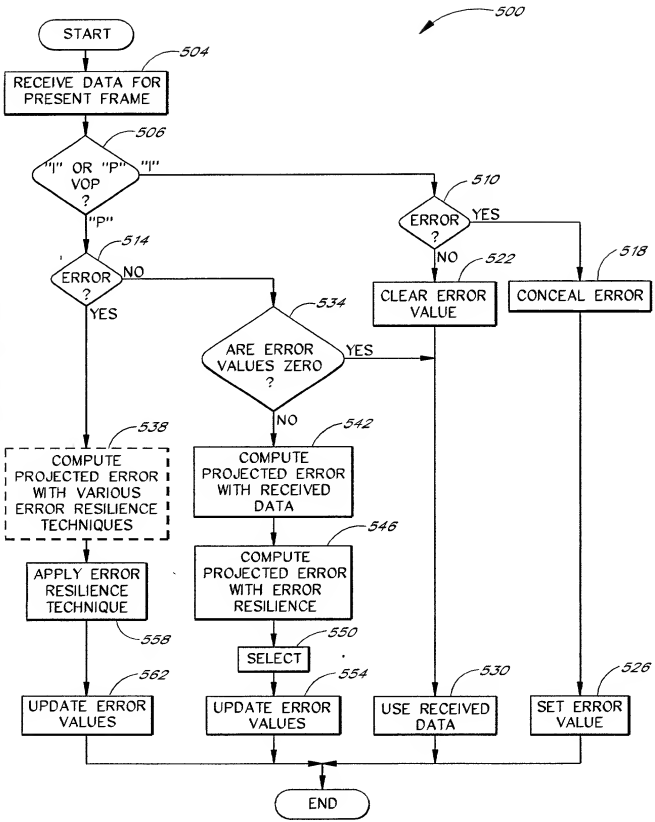

500
START
504
RECEIVE DATA FOR PRESENT FRAME
506
"I" OR "P" VOP ?
"I"
"P"
510
ERROR ?
YES
NO
518
CONCEAL ERROR
522
CLEAR ERROR VALUE
514
ERROR ?
NO
YES
534
ARE ERROR VALUES ZERO ?
YES
NO
538
COMPUTE PROJECTED ERROR WITH VARIOUS ERROR RESILIENCE TECHNIQUES
542
COMPUTE PROJECTED ERROR WITH RECEIVED DATA
546
COMPUTE PROJECTED ERROR WITH ERROR RESILIENCE
APPLY ERROR RESILIENCE TECHNIQUE
558
550
SELECT
562
UPDATE ERROR VALUES
554
UPDATE ERROR VALUES
530
USE RECEIVED DATA
526
SET ERROR VALUE
END

FIG. 5

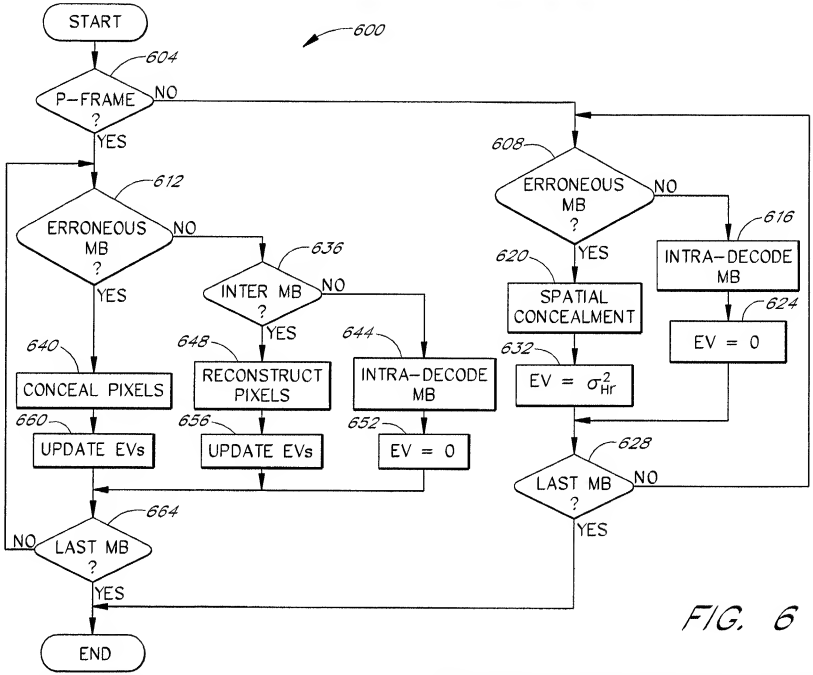

START
600
604
P-FRAME ?
NO
YES
612
ERRONEOUS MB ?
NO
YES
636
INTER MB ?
NO
YES
640
CONCEAL PIXELS
648
RECONSTRUCT PIXELS
644
INTRA-DECODE MB
660
UPDATE EVs
656
UPDATE EVs
652
EV = 0
664
LAST MB ?
NO
YES
608
ERRONEOUS MB ?
NO
YES
616
INTRA-DECODE MB
620
SPATIAL CONCEALMENT
624
EV = 0
632
EV = σ^2_{Hr}
628
LAST MB ?
NO
YES
END

FIG. 6

20050207.152600T

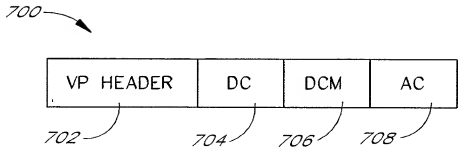


FIG. 7A

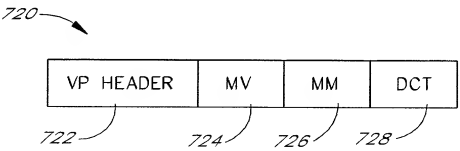
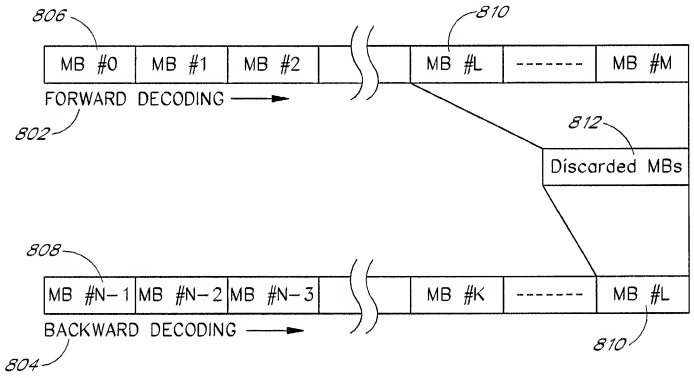


FIG. 7B


806
810
MB #0
MB #1
MB #2
MB #L

MB #M
FORWARD DECODING
802
812
Discarded MBs
808
MB #N-1
MB #N-2
MB #N-3
MB #K

MB #L
BACKWARD DECODING
804
810

FIG. 8

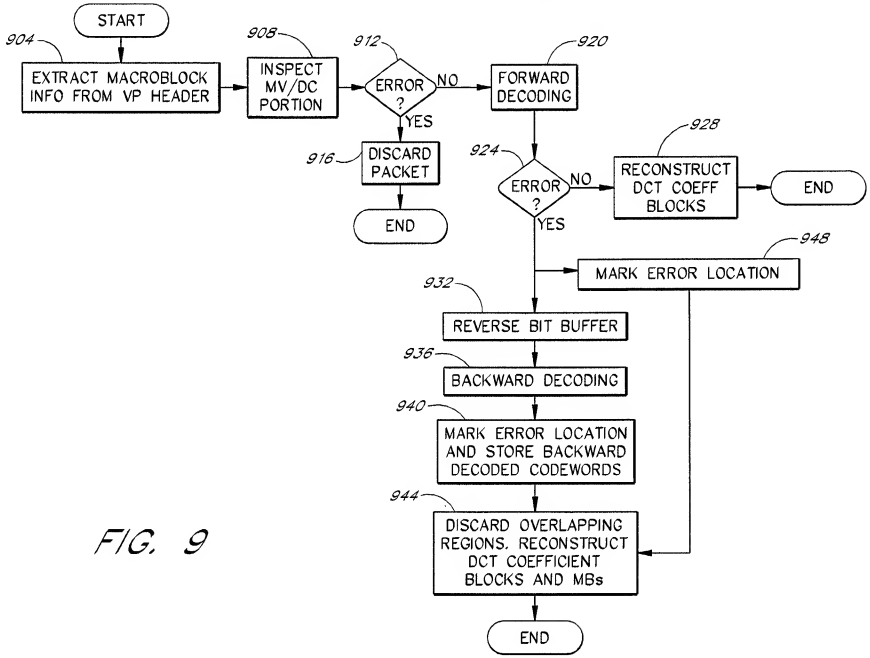

START
904
EXTRACT MACROBLOCK INFO FROM VP HEADER
908
INSPECT MV/DC PORTION
912
ERROR ?
NO
YES
920
FORWARD DECODING
916
DISCARD PACKET
END
924
ERROR ?
NO
YES
928
RECONSTRUCT DCT COEFF BLOCKS
END
948
MARK ERROR LOCATION
932
REVERSE BIT BUFFER
936
BACKWARD DECODING
940
MARK ERROR LOCATION AND STORE BACKWARD DECODED CODEWORDS
944
DISCARD OVERLAPPING REGIONS. RECONSTRUCT DCT COEFFICIENT BLOCKS AND MBs
END

FIG. 9

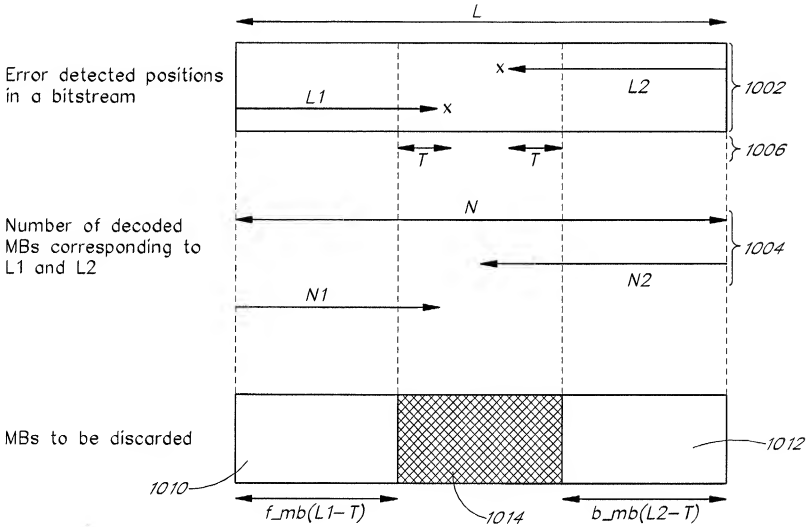


FIG. 10
(PRIOR ART)

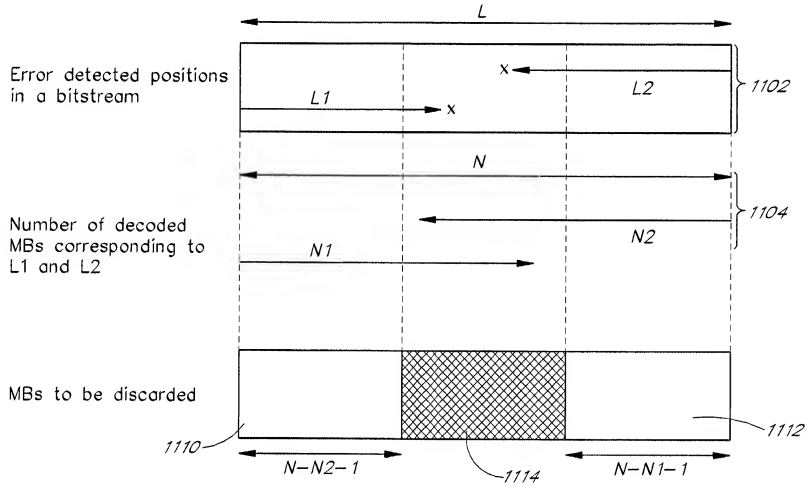


FIG. 11
(PRIOR ART)

20080°E52600T

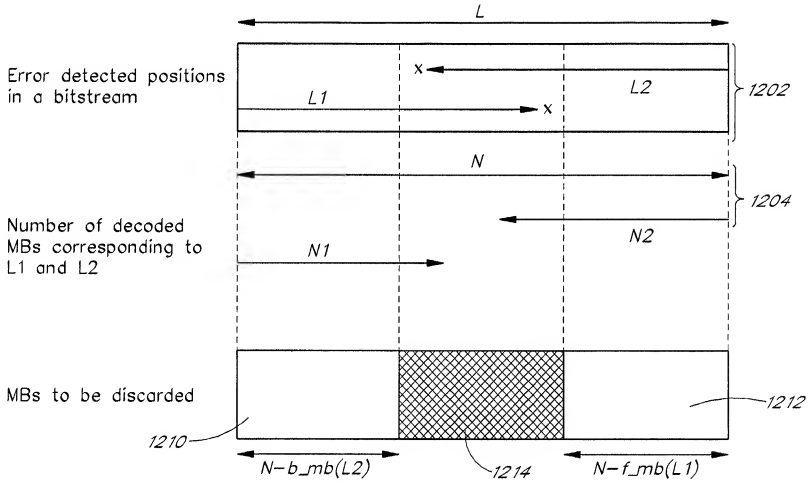


FIG. 12
(PRIOR ART)

20500 ESE2600T

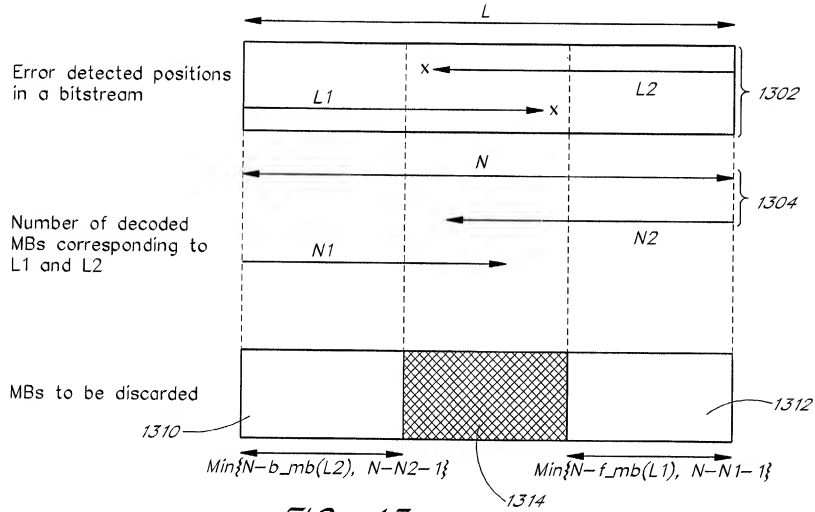


FIG. 13
(PRIOR ART)

20050203*ES2260071

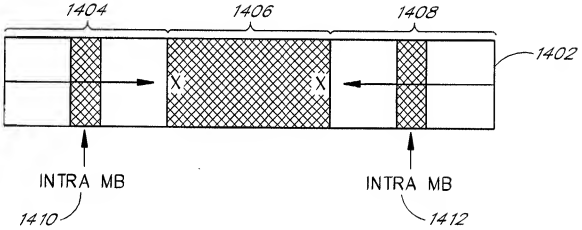


FIG. 14

20502C0 ES26001

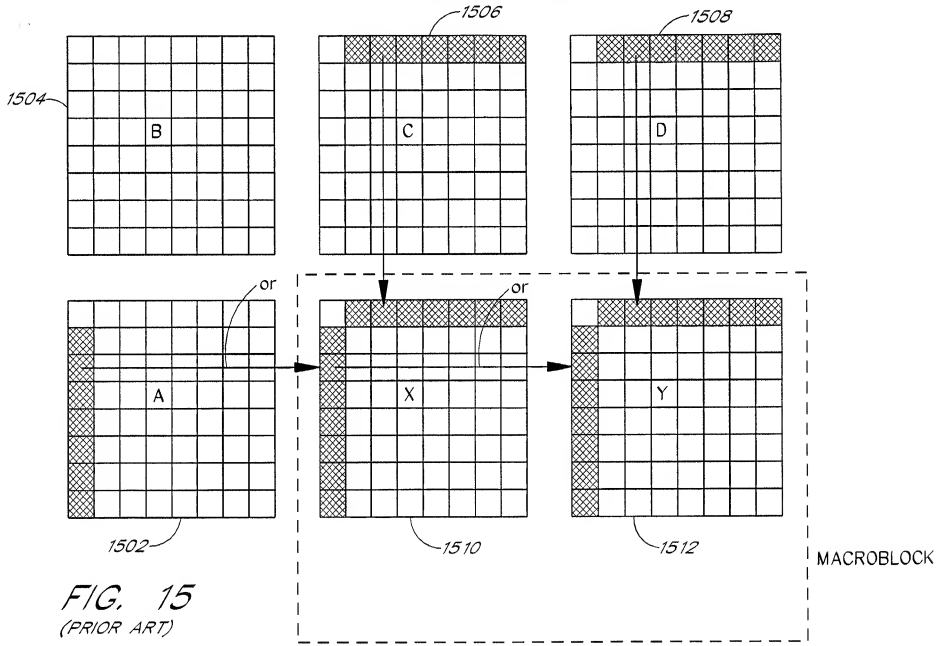


FIG. 15
(PRIOR ART)

20050207.1523.26007

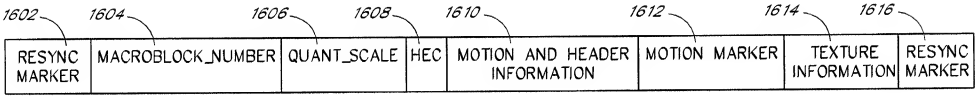


FIG. 16
(PRIOR ART)

20502O' ES2260OT

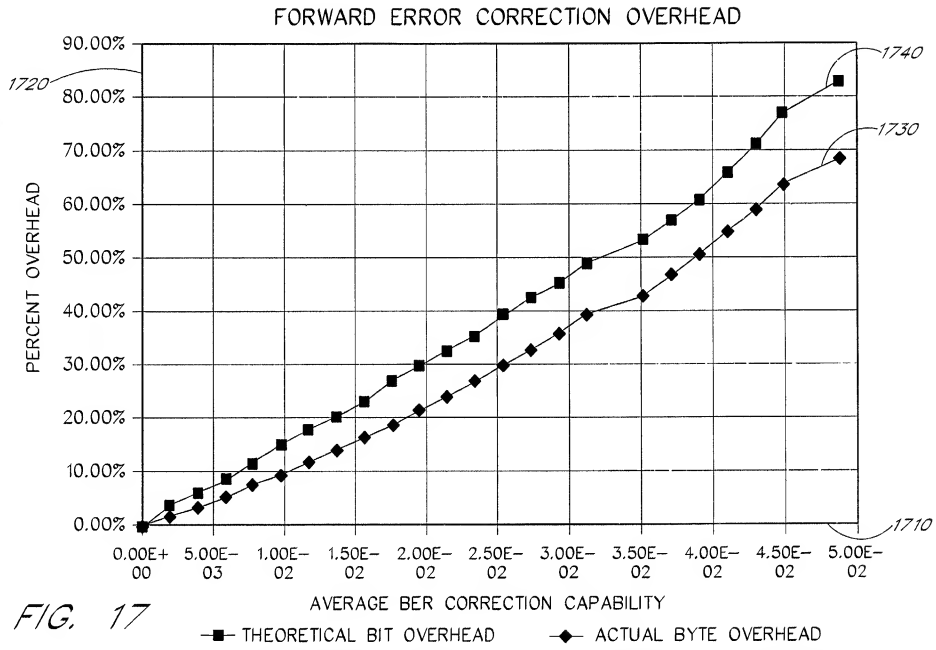


FIG. 17

1009253.020502

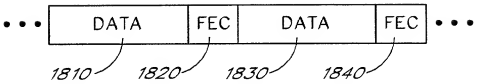


FIG. 18

20050223502

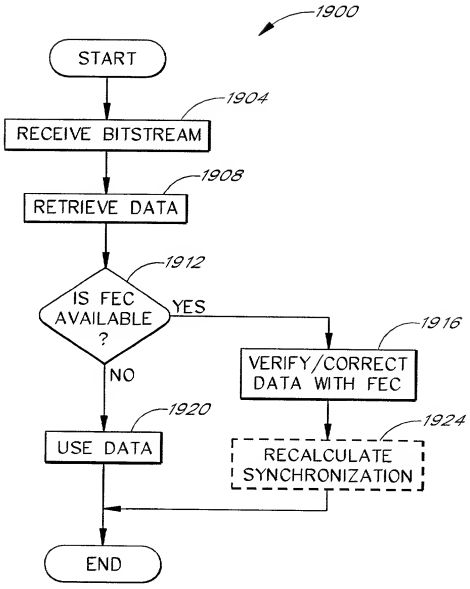


FIG. 19

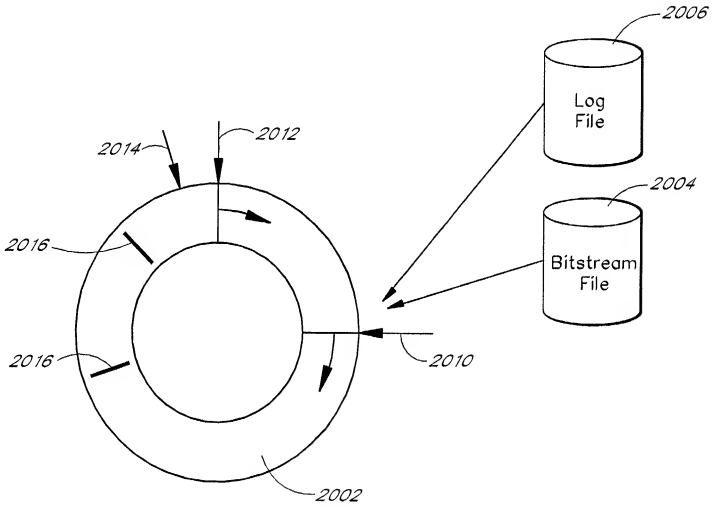

2006
Log File
2004
Bitstream File
2014
2012
2016
2016
2010
2002

FIG. 20